



ASSEMBLY — 41ST SESSION

TECHNICAL COMMISSION

Agenda Item 30: Aviation Safety and Air Navigation Policy

30.1 Global Aviation Safety Plan (GASP), and implementation of regional and national aviation safety plans

AVIATION SAFETY FOR REGIONAL AIRCRAFT OPERATIONS

(Presented by the International Coordinating Council of Aerospace Industries Associations (ICCAIA), International Federation of Air Line Pilots Associations (IFALPA), International Federation of Air Traffic Controllers Associations (IFATCA))

EXECUTIVE SUMMARY

Regional connectivity is a key to economic sustainability and growth, boosting local business, tourism and enabling better access to education, health and culture. Regional aircraft operations (including turboprop and turbojet operations) provide an increasingly efficient means to meet this need. However, the safety record of regional operations continues to lag behind the safety performance achieved by other segments of the overall industry. This paper notes progress made since the 40th Assembly and identifies some actions that can be taken towards improving the safety of regional operations

Action: The Assembly is invited to:

- a) request ICAO to continue to place safety for regional aircraft operations as a high priority in its work programme;
- b) request the Council to urge member States to implement SMS programs for stakeholders involved in regional operations;
- c) request ICAO to further engage with all stakeholders to analyse available data so that its future work on improving regional aircraft operations can be focused on the areas where most benefit would be gained;
- d) adopt a revision to A40-1, Appendix A, related to the Global Aviation Safety Plan, to emphasize regional aircraft operations; and
- e) request ICAO to review and revisit goals identified in A37-11, related to performance-based navigation global goal, to provide a new impetus to implement approach procedures with vertical guidance (APV) for all instrument runway ends.

<i>Strategic Objectives:</i>	This working paper relates to the Safety, Air Navigation Capacity and Efficiency and Air Transport development Strategic Objectives.
<i>Financial implications:</i>	The activities referred to in this paper will be undertaken subject to the resources available in the 2020-2022 Regular Programme Budget and/or from extra budgetary contributions.
<i>References:</i>	Doc 10140, <i>Assembly Resolutions in Force (as of 4 October 2019)</i> Doc 10004, <i>Global Aviation Safety Plan</i> Annex 6 — <i>Operation of Aircraft</i>

¹ English, Arabic, Chinese, French, Russian and Spanish versions provided by ICCAIA.

1. INTRODUCTION

1.1 Regional connectivity is a key to economic sustainability and growth, boosting local business, tourism and enabling better access to education, health and culture. Regional aircraft operations provide an increasingly efficient means to meet this need.

1.2 The safety record of regional aircraft operations has improved in recent years, but depending on the timeframe examined, continues to lag behind the safety performance achieved by other segments of the industry. There is a critical need for the same level of safety standards and confidence from crews and passengers in travel across all types of operation, whether domestic, regional or international...

2. DISCUSSION

2.1 At the 40th ICAO Assembly, the Technical Commission supported the proposal to conduct further analysis of available data to target future work in areas having the greatest impact on flight safety and welcomed the support of industry to conduct this work. The Commission also noted the benefit to such operations from increased implementation of vertically guided approaches and recalled Assembly Resolution A37-11 which urged States to implement performance-based navigation (PBN) approaches on all instrument runways by 2016.

2.2 Industry, ICAO and IATA data suggests that regional aircraft operations continue to have a higher incident rate than international operations. It should be noted that all aircraft used in regional operations are certified to the same airworthiness standards as those used in international operations.

2.3 Assembly resolution A40-1 stresses the need for continuous improvement of aviation safety through a reduction in the number of accidents and related fatalities in air transport operations in all parts of the world, particularly in States where safety records are significantly worse than the worldwide average. Close coordination is needed to ensure the continued development and implementation of practical and sustainable policies, approaches, and measures to improve the safety of regional aircraft operations, including training, maintenance and infrastructure improvement and oversight, especially in light of impacts of the COVID-19 pandemic on staff and operations.

2.4 Collection and use of data is key to understanding and correcting issues. ICCAIA welcomes the upcoming amendment to Annex 6, Part I, which lowers the threshold of certified take-off mass beyond which the operator shall establish and maintain a flight data analysis programme and encourages States to implement flight data monitoring programs. This will assist States and Industry in better understanding issues associated with regional operations.

2.5 An additional step would be to ensure a “Just Culture” approach in the Safety Management Systems of all aviation related organizations involved in regional operations. Promotion of SMS for local repair stations and maintenance organisations for example, would ensure approved processes and quality assurance throughout the entire ecosystem

2.6 Runway Safety and Controlled Flight into Terrain account for a high percentage of accidents in scheduled commercial operations. One of the mitigations available for these high-risk accidents is the availability of instrument approaches with vertical guidance. Regional operations frequently serve less developed airports that have limited infrastructure including instrument approach guidance. Performance Based Navigation (PBN) uses satellites and PBN-compliant on-board equipment for

navigation purposes. PBN approaches do not require large investments in ground-based navigation aids (purchase plus maintenance) and the safety benefits are unquestionable. In addition, PBN allows increased airspace capacity, improves operational efficiency, and reduces environmental impact.

2.7 Recalling Assembly Resolution A37-11 below, and recognizing the good progress made so far in this area, ICCAIA urges States to continue to work with their air navigation service providers and air operators to design and approve approach procedures, with vertical guidance, as soon as practicable at airports serving commercial air operations. Noting the definition of targets in A37-11 for implementation, ICCAIA encourages ICAO to conduct a review of progress against these goals and revise targets for implementation.

A37-11 Performance-based navigation global goals

Recognizing that not all States have developed a PBN implementation plan by the target date of 2009;

The Assembly:

1. *Urges* all States to implement RNAV and RNP air traffic services (ATS) routes and approach procedures in accordance with the ICAO PBN concept laid down in the Performance-based Navigation (PBN) Manual (Doc 9613);

2. *Resolves* that:

a) States complete a PBN implementation plan as a matter of urgency to achieve:

1) implementation of RNAV and RNP operations (where required) for en route and terminal areas according to established timelines and intermediate milestones;

2) implementation of approach procedures with vertical guidance (APV) (Baro-VNAV and/or augmented GNSS), including LNAV-only minima, for all instrument runway ends, either as the primary approach or as a back-up for precision approaches by 2016 with intermediate milestones as follows: 30 per cent by 2010, 70 per cent by 2014; and

3) implementation of straight-in LNAV-only procedures, as an exception to 2) above, for instrument runways at aerodromes where there is no local altimeter setting available and where there are no aircraft suitably equipped for APV operations with a maximum certificated take-off mass of 5 700 kg or more;

2.8 Training for regional operations has become even more relevant during the COVID-19 pandemic due to loss of staff and skills decay. Regional operations have specific challenges that need to be taken into account, including less equipped airports, multi-leg operations, lack of training options in remote areas, skills shortage and higher staff turnover as economic model favours higher remuneration for pilots flying larger aircraft/ higher-density routes. It results in higher training efforts required and higher costs for regional operators whereas their investment in training within this market segment has benefits for the overall industry. Specific measures and incentives for regional to attract and retain skills (structured ab-initio training and career paths for pilots and technicians), make simulator training more efficient/accessible, and favour EBT deployment, will help maintain the required standards.

2.9 Industry commits to continued efforts to analyse data to target future work in areas having the greatest impact on flight safety, as operations pick up following the reduction in services during the COVID-19 pandemic.

3. **CONCLUSION**

3.1 Regional connectivity opens economic development opportunities, boosts tourism and promotes better access to education, health and culture. A continued emphasis on regional operations is needed to ensure that practical measures are implemented to support a sustained improvement in safety and reduction in accident rates.

APPENDIX

A40-1: ICAO global planning for safety and air navigation

Appendix A - Global Aviation Safety Plan (GASP)

Reaffirming that the primary objective of the Organization continues to be the improvement of safety and an associated reduction in the number of accidents and related fatalities within the international civil aviation system;

Recognizing that safety is a responsibility involving ICAO, Member States and all other stakeholders;

Recognizing the safety benefits that can be drawn from partnerships between States and industry;

Recognizing that the High-level Safety Conference (2010) reaffirmed the need for the ICAO safety framework to continuously evolve to ensure its sustained effectiveness and efficiency in the changing regulatory, economic and technical environment; Noting that the expected increase in international civil aviation traffic will result in an increasing number of aircraft accidents unless the accident rate is reduced;

Recognizing the need to maintain the public's confidence in air transport by providing access to relevant safety information;

Recognizing that a proactive approach in which a strategy is established to set priorities, targets and indicators to manage safety risks is of paramount importance to the achievement of further improvements in aviation safety;

Recognizing that regional aviation safety groups have been implemented by ICAO, taking into account the needs of the various regions and building on the already existing structures and forms of cooperation;

Noting the intent to apply the safety management principles in the GASP to enhance safety by focusing action where it is most needed;

Noting the development of the global aviation safety roadmap, as an action plan to assist the aviation community in implementing the safety initiatives presented in the GASP, through a structured, common frame of reference for all relevant stakeholders; and

Noting the need to assist Member States in implementing safety management principles and mitigate risks on identified operational issues;

The Assembly:

1. Stresses the need for continuous improvement of aviation safety through a reduction in the number of accidents and related fatalities in air transport operations, including regional aircraft operations, in all parts of the world, particularly in States where safety records are significantly worse than the worldwide average;

2. Stresses that limited resources of the international aviation community should be used strategically to support States or regions whose safety oversight maturity is not at an acceptable level;
3. Urges Member States to implement national aviation safety plans consistent with the GASP to continually reduce fatalities and the risk of fatalities;
4. Urges Member States, regional safety oversight organizations (RSOOs), regional aviation safety groups (RASGs) and international organizations concerned to work with all stakeholders to implement regional aviation safety plans consistent with the GASP to continually reduce fatalities and the risk of fatalities;
5. Urges States to fully exercise safety oversight of their operators in full compliance with applicable Standards and Recommended Practices (SARPs), and assure themselves that every foreign operators flying into their territory receives adequate oversight from its own State and take appropriate action when necessary to preserve safety; and
6. Encourages ICAO to continue the development of the global aviation safety roadmap, as required.

— END —